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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/550,078	04/14/2000	Junichi Yoshio	041465-5077	9335

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EXAMINER

FAULK, DEVONA E

ART UNIT PAPER NUMBER

2615

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/550,078	Applicant(s) YOSHIO ET AL.	
	Examiner Devona E. Faulk	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7 and 9-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7 and 9-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. The applicant's RCE was received and the amendment entered.
2. Claims 2 and 8 are cancelled.
3. Claims 1,7 and 13 have been amended and claims 18-26 are new.

Drawings

4. The drawings are objected to because Figure 10 has a typographical error. In S5 extracted is misspelled "extracr". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

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corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. **Claims 1 and 7** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1 and 7 newly recite ""if a transmission of **predetermined other information** is required, said generating device generates the information unit comprising the divided-audio information, the first output control information and said predetermined other information in place of the second output control information". The specification discloses, on page 40, lines 5-10 that if the transmission of the second output control information is not required, the isochronous packet IP is constituted after another arbitrary data OD is included therein. The specification similarly reads on page 37, lines 9-16.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. **Claims 1,7 and 22** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1,7 and 22 recite "first output control information to be transmitted through said data bus, in response to the number of samplings preset in the audio information". The specification teaches, on page 34, lines 13-18, that the first output control data is to be included in all the isochronous packets IP of the output control data and transmitted using a label indicative of attributes of the subsequent respective data in the eleventh row as a lead. The specification recites the claim language on page 8, lines 7-13 but there is no disclosure that the first control data is sent in response to the number of samplings.
9. **Claims 1 and 7** recites the limitation "predetermined other information" in line 23. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 1,5,6,7,11-13,16 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo et al. (USPN Patent 6,618,396) in view of Kobayashi et al. (USPN Patent 6,144,411) in further view of Sato et al. (USPN 5,802,017).

Regarding claims 1,7 and 13 Kondo discloses an information converting method of converting audio information, which comprises a plurality of partial-audio information based on a predetermined record standard in each of which output control information to control a state of the audio information at a time of outputting the audio information to an external portion is included, into transmission information to be transmitted through a data bus based on a predetermined transmission standard (Figure 1, IEEE 1394 Standard), said method comprising:

an extracting process of extracting the output control information from each of the partial-audio information (1301, header analyzer; column 23, lines 62-67);

a dividing process of dividing the audio information for a predetermined so as to transmit the transmission information through the data bus, to thereby generate divided-audio information (column 17, lines 3-5; encoder (103);

a generating process of adding the extracted output control information onto the generated divided-audio information to thereby generate an information unit for transmitting the audio information through said data bus (105, packet generating device,105; column 17, lines 13-15); and

an outputting process of generating the transmission information by using a plurality of the generated information units and outputting the generated transmission information onto said data bus (data transmitter 107; column 17, lines 14-17).

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Regarding claim 13, Kondo further teaches of a reproducing apparatus for reproducing the audio information (receiving end, TV; Figure 39)

Kondo fails to disclose that there is a predetermined format established for transmission (corresponds to claim language "which is set in advance"). It is known and more common in the art to have a predetermined format as claimed. The concept of having a predetermined format was well known at the time of filing as taught by Kobayashi. Kobayashi discloses image-processing apparatus with format conversion using an IEEE 1394 (Figure 1) interface and using a predetermined format (column 8, lines 30-49; column 6, lines 4-16). He further teaches that this can be done for audio (column 8, lines 30-49). Thus it would have been obvious to one of ordinary skill in the art to have a predetermined transmission format in order to facilitate faster processing.

Kondo as modified by Kobayashi teaches of first output control information (packet header) and a second output control information (See Figures 31 (a) and 31 (b); anyone of the other parameters could read on a second output control information).

Kondo as modified by Kobayashi fails to disclose "if a transmission of predetermined other information is required, said generating process generates the information unit comprising the divided-audio information, the first output control information and said predetermined other information in place of the second output control information".

Sato discloses an information signal apparatus including a predetermined other information (pieces of data; column 6, lines 29-32; pieces of data (1010001 and 110111) are set in the OPR1 and OPR 2 fields, if the audio recording mode is set to

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SD, which means four channels. The packet header reads on first output control information. The recording mode reads on a second control information that may or may not be required and if required, the pieces of data are set and transmitted along with the first output control information.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kondo as modified by Kobayashi by have the transmission of some predetermined other data occur as taught by Sato in order to provide an apparatus having a recording mode specifying command and an operation mode specifying command.

Regarding **claims 4,10 and 15**, Kondo as modified by Kobayashi and Sato disclose said generating process adds first identification information indicative of a content of the first output control information at a position to be transmitted prior to the first output control information within each of the information unit, and

Said generating process adds second identification information indicative of a content of the second output control information at a position to be transmitted prior to the second control information within each of the information unit (Kondo, packet generation device that adds headers for transmissions to respective packs, and generate packets; column 17, lines 13-15).

Regarding **claims 5,11, and 16** Kondo as modified by Kobayashi discloses wherein the predetermined transmission standard is an IEEE (Institute of Electrical and Electronic Engineers) 1394 standard and the data bus comprises a serial data bus through which the transmission information is transmitted in accordance with the IEEE

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1394 standard, and said information unit comprises one portion of an isochronous packet based on the IEEE 1394 standard. Kondo further teaches of the IEEE 1394 I/F as the transmission method. Isochronous transfer is a communication method for used by data transmission, which must be made in real time as is typical of audio/video data (column 1, lines 30-32). Kondo teaches of an isopacket (Figure 19(a)).

Regarding **claims 6,12 and 17** Kondo as modified by Kobayashi discloses wherein the predetermined record standard is a DVD audio standard, the partial-audio information comprises an audio pack based on the DVD audio standard and the output control information comprises information in a private header based on the DVD audio standard. Kondo teaches that of using the DVD-video standard (column 19, line 61). Since the transmitting device is capable of audio processing as well, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the DVD-audio standard for the benefit of increasing the capability and functionality of the device.

12. Regarding **claim 22**, Kondo discloses an information reproducing apparatus (Kondo further teaches of a reproducing device for reproducing the audio information ; receiving end, TV; Figure 39) comprising

an inputting device for inputting transmission information comprising a plurality of information units through a data bus, each of the information units comprising audio information and output control information to control a state of the audio information at a time of outputting the audio information (Figure 1; encoder, packet generator column ;23, lines 62-67;column 17, lines 3-5; encoder (103));

a reproducing device for reproducing the audio information based on the output control information (receiving end, TV; Figure 39)

Kondo fails to disclose that there is a predetermined format established for transmission (corresponds to claim language "predetermined transmission standard"). It is known and more common in the art to have a predetermined format as claimed. The concept of having a predetermined format was well known at the time of filing as taught by Kobayashi. Kobayashi discloses image-processing apparatus with format conversion using an IEEE 1394 (Figure 1) interface and using a predetermined format (column 8, lines 30-49; column 6, lines 4-16). He further teaches that this can be done for audio (column 8, lines 30-49). Thus it would have been obvious to one of ordinary skill in the art to have a predetermined transmission format in order to facilitate faster processing.

Kondo as modified by Kobayashi teaches of first output control information (packet header) and a second output control information (See Figures 31 (a) and 31 (b); anyone of the other parameters could read on a second output control information).

Kondo as modified by Kobayashi fails to disclose "the output control information comprising first output control information in response to the number of samplings preset in the audio information, wherein each of the information units further comprises anyone of the second output control information, the predetermined other information being transmitted if required.

Sato discloses an information signal apparatus including a predetermined other information (pieces of data; column 6, lines 29-32; pieces of data (1010001 and

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110111) are set in the OPR1 and OPR 2 fields, if the audio recording mode is set to SD, which means four channels. The packet header reads on first output control information. The recording mode reads on a second control information that may or may not be required and if required, the pieces of data are set and transmitted along with the first output control information.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kondo as modified by Kobayashi by have the transmission of some predetermined other data occur as taught by Sato in order to provide an apparatus having a recording mode specifying command and an operation mode specifying command.

Regarding **claims 18,20 and 23**, Kondo as modified by Kobayashi and Sato discloses wherein the second output control information and the predetermined other information have address information indicating that succeeding information is the second output control information or the predetermined other information (Sato; column 6, lines 23-37; Figures 3A-3D and Figure 7; See above apropos rejection of claim s 1 and 22).

Regarding **claims 19,21 and 24** Kondo as modified by Kobayashi and Sato discloses wherein the information unit is one sampling unit and comprises the divided audio information, the first output control information and the second output control information, wherein the divided audio information comprises audio information , where the audio information is divided by channel (Sato; Figures 3A-3D).

Regarding **claim 25**, Kondo as modified by Kobayashi and Sato discloses wherein the reproducing device reproduces the audio information based on the first output control information and the second output control information (Sato, Figure 7; Figures 3A-3D See above apropos rejection of claim 22).

Regarding **claim 26**, Kondo as modified by Kobayashi and Sato discloses wherein the reproducing device determines whether the succeeding information is the second output control information or the predetermined other information based on the address information, and reproduces the audio information based on the first output control information and the second output control information if the succeeding information is the second output control information (Sato, Figure 7; Figures 3A-3D ;See above apropos rejection of claim 22).

Claim Objections

13. **Claims 3,9 and 14** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devona E. Faulk whose telephone number is 571-272-7515. The examiner can normally be reached on 8 am - 5 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848.

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The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2615. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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